

THE WEST AMERICAN MOLLUSKS OF THE GENUS CINGULA.

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Of the genus *Cingula* we now know six species on the West Coast of America, three of which are new. The first record was made by Doctor Krause in a paper on the Mollusks of Bering Sea,¹ when he described *Cingula robusta* (Dall MS.) Krause. The following year Doctor Dall redescribed *Cingula robusta* and named the two extremes of this form *C. r. martyni* and *C. r. scipio*, suggesting *martyni* for the specific name, if the information he had received that *robusta* was preoccupied should prove true.² In the same paper, page 307, he described *Onoba aleutica* Dall, which I now refer to the present genus.

Of the three species now added, two—*C. alaskana* and *C. katherinæ*—come from Alaska, while the third—*C. montereyensis*—the southernmost member of the genus, comes from Monterey, California.

The four species described by Prof. C. B. Adams³ as *Cingula pauperula*, *Cingula* (?) *inconspicua*, *Cingula* (?) *terebellum*, and *Cingula* (?) *turrita*, are all Pyramidellidæ and were referred to their proper places by Doctor Dall and the writer in Bulletin 68, United States National Museum.

CINGULA MARTYNI Dall.

Plate 41, figure 5.

Cingula robusta martyni DALL, Proc. U. S. Nat. Mus., vol. 9, 1886, p. 306, pl. 3, fig. 9.—*Cingula robusta* (Dall MS.) KRAUSE, Arch. f. Naturg., 1885, p. 270, pl. 17, fig. 1, *a-b*, not *Cingula robusta* H. C. LEA, Proc. Bost. Soc. Nat. Hist., 1844, p. 204.

Shell elongate-ovate, light chestnut brown. Nuclear whorls scarcely differentiated from the succeeding turns, smooth. Post-nuclear whorls well rounded, smooth excepting fine, incremental lines. Suture well constricted. Periphery and base of the last whorl

¹ Arch. f. Naturg., vol. 51, 1885, p. 270, pl. 17, fig. 1.

² See synonymy of *Cingula martyni*.

³ Ann. Lyc. Nat. Hist. N. Y., 1852, pp. 405-6.

inflated, well rounded, the latter narrowly umbilicated, smooth excepting fine, incremental lines. Aperture very large, broadly oval, almost circular; outer lip decidedly expanded, thin; columella strongly curved and very slightly reflected; parietal wall covered with a thick callus which renders the peritreme complete.

The type (Cat. No. 213527, U.S.N.M.) has a little more than five whorls and measures: length 5 mm., diameter 3.2 mm. In some specimens of this species faint, spiral lines are apparent.

Specimens examined.

Catalogue No.	Locality.	Number of specimens.
61337	Plover Bay, East Siberia.....	12
213535	do.....	2
213533	North end Nunivak Island, Alaska.....	48
160977	St. Paul, Pribilof Islands, Alaska.....	1
213534	Bering Island, Alaska (6 to 10 fathoms).....	151
161047	Kyska Harbor, Aleutians, Alaska.....	15
161070	do.....	1
161075	do.....	1
161099	do.....	8
161104	Kyska Harbor, Aleutians, Alaska (beach, low water).....	40
¹ 206036	Kyska Harbor, Aleutians, Alaska.....	18
210466	do.....	15
213527	do.....	1,332
213529	Kyska Harbor, Aleutians, Alaska (10 fathoms, sandy mud).....	26
213530	Kyska Harbor, Aleutians, Alaska (6 to 8 fathoms, sand).....	2
213532	Constantine Harbor, Amchitka Island, Aleutians, Alaska.....	40
213528	Korovin Bay, Atka Island, Alaska.....	2,662
213531	Nazan Bay, Atka Island, Alaska.....	19

¹ 1 = type.

CINGULA MARTYNI SCIPPIO Dall.

Plate 41, figure 6.

Cingula robusta scipio DALL, Proc. U. S. Nat. Mus., vol. 9, 1886, p. 306, pl. 4, fig. 10.

Shell similar to *martyni* but more slender, with the spiral sculpture usually more pronounced.

The type (Cat. No. 213536, U.S.N.M.) has a little more than five post-nuclear whorls and measures: Length, 4 mm.; diameter, 2.2 mm.

Specimens examined.

Catalogue No.	Locality.	Number of specimens.
56400	St. Georges Island, Alaska.....	1
¹ 213536	Kyska Harbor, Aleutians, Alaska.....	5
213537	Chika Islands, Akutan Pass, Alaska (low water).....	14
213538	Unalaska, Alaska.....	4
213539	East side Simeonoff Island, Shumagins, Alaska.....	93
83230	West side Middleton Island, Alaska (10 to 12 fathoms, gravel) ..	1

¹ 1 = type.

CINGULA ALASKANA, new species.

Plate 41, figure 4.

Shell subglobose, light brown. Nuclear turns one and one-quarter, well rounded, smooth excepting fine, incremental lines. Post-nuclear

whorls inflated, well rounded, marked by strong, incised, equal, and equally spaced, spiral grooves, which are about two-thirds as wide as the spaces that separate them; about 10 of these grooves occur between the sutures on the second, and 13 on the penultimate whorl. Suture well impressed. Periphery of the last whorl strongly inflated. Base rather short, inflated, well rounded, very narrowly umbilicated, marked like the spire with spiral grooves. In addition to the spiral sculpture the post-nuclear whorls are marked by rather strong, incremental lines, which extend over the entire surface of the post-nuclear spire. Aperture large, oval, slightly angulated at the posterior angle; outer lip thin, showing the external markings within; columella curved, slightly reflected; parietal wall glazed with a thick callus, which completes the peritreme; operculum horny, pauci-spiral.

The type (Cat. No. 160995, U.S.N.M.) has two and one-half post-nuclear whorls and measures: Length 2.6 mm, diameter 2 mm. It was collected by Doctor Dall at Amchitka Island, Alaska.

CINGULA ALEUTICA Dall.

Plate 41, figure 2.

Onoba aleutica DALL, Proc. U. S. Nat. Mus., vol. 9, 1886, p. 307, pl. 3, fig. 11.

Shell elongate-ovate, light yellow. Nuclear whorls scarcely differentiated from the succeeding turns. Post-nuclear whorls strongly rounded, appressed at the summit, marked by very fine, incremental lines only. Suture strongly constricted. Periphery of the last whorl and the moderately long base well rounded, the latter narrowly umbilicated, marked like the spire. Aperture large, oval, slightly expanded at the edge; posterior angle decidedly obtuse; peritreme complete, dark brown at the edge; outer lip thin; columella oblique, strongly curved; parietal wall covered with a thick callus, which is appressed to the succeeding whorl, completing the peritreme.

The type (Cat. No. 213525, U.S.N.M.) has five and one-half post-nuclear whorls and measures: Length 3.2 mm., diameter 1.7 mm.

Specimens examined.

Catalogue No.	Locality.	Number of specimens.
¹ 213525	Unalaska, Alaska.....	2
151618	St. Pauls Island, Alaska.....	1
160981	St. Paul, Pribiloff Islands, Alaska (6 to 9 fathoms).....	1
161089	Constantine Harbor, Amchitka Island, Aleutians, Alaska.....	1
160871	Popoff Strait, Shumagins, Alaska (6 fathoms).....	5
180354	Cooks Inlet, near Soldovia, Alaska.....	1
204022	Windfall Harbor, Admiralty Island, Alaska.....	1
203702	do.....	1
213526	Kyska Harbor, Aleutians, Alaska (beech, low water).....	126

¹ Figured type.

CINGULA KATHERINÆ, new species.

Plate 41, figure 3.

Shell subglobose, dark brown. Nuclear whorls about one and one-quarter, well rounded, smooth. Post-nuclear whorls strongly, roundly shouldered at the summit, well rounded on the sides, marked by fine, incremental lines only. Suture strongly constricted. Periphery of the last whorl inflated. Base moderately long, well rounded, narrowly umbilicated, smooth excepting incremental lines. Aperture large, oblique, broadly oval; outer lip thin; columella curved and slightly reflected; parietal wall covered with a thick callus which renders the peritreme complete.

The type (Cat. No. 206103, U.S.N.M.) was collected by Mrs. Kate Stephens, for whom it is named, at Windfall Harbor, Admiralty Islands, Alaska. It has three post-nuclear whorls, and measures: Length 2.7 mm., diameter 2 mm.

CINGULA MONTEREYENSIS, new species.

Plate 41, figure 1.

Shell elongate-conic, light brown. Nuclear whorls one and one-half, well rounded, smooth. Post-nuclear whorls appressed at the summit, moderately rounded, marked by fine, incremental lines only. Suture only slightly constricted. Periphery of the last whorl somewhat inflated, well rounded, with a very narrow umbilical chink, smooth excepting fine, incremental lines. Aperture broadly oval, somewhat effuse anteriorly; posterior angle obtuse; outer lip thin; columella curved; parietal wall glazed with a moderately strong callus, which joins the posterior angle of the aperture with the insertion of the columella.

The type (Cat. No. 127547, U.S.N.M.) and four specimens come from Monterey, California. The type has five and a half post-nuclear whorls, and measures: Length 4 mm., diameter 2.1 mm.

EXPLANATION OF PLATE 41.

- Fig. 1.—*Cingula montereyensis* Bartsch. Type. Long. 4 mm.; p. 488.
2.—*Cingula aleutica* Dall. Type. Long. 3.2 mm.; p. 487.
3.—*Cingula katherinæ* Bartsch. Type. Long. 2.7 mm.; p. 488.
4.—*Cingula alaskana* Bartsch. Type. Long. 2.6 mm.; p. 486.
5.—*Cingula martyni* Dall. Type. Long. 5 mm.; p. 485.
6.—*Cingula martyni scipio* Dall. Type. Long. 4 mm.; p. 486.